

### ABSTRACT

A calibration circuit and related method for adjusting a common electrode voltage  $V_{com}$  of a liquid crystal display (LCD) in response to commands received by way of a single-wire interface. The calibration circuit includes a controller to receive and interpret commands in the form of positive and negative pulses for respectively increasing and decreasing  $V_{com}$  by a predetermined amount per pulse. The calibration circuit also includes a counter for generating a count related to  $V_{com}$ , wherein the controller causes the count to decrement and increment in response to the positive and negative command pulses. The calibration circuit further includes a non-volatile memory for storing the count, wherein the controller causes the count to be stored into the non-volatile memory in response to another command in the form of a voltage above a predetermined threshold. This voltage is also used for programming the non-volatile memory.